

BEST AVAILABLE COPY**REMARKS/ARGUMENTS**

1. Amendments to the specification:

Paragraphs 0008 and 0012 are amended to correct formatting and capitalization errors. Acceptance of the amended specification is respectfully requested.

5

2. Rejection of claims 2-5 under 35 U.S.C. 112, second paragraph:

Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 2-5, "the circuit board" has no antecedent basis.

10

Response:

Claims 2-5 are currently amended to replace the terms "circuit board" and "printed circuit board" with the term "dielectric layer". The term "dielectric layer" contains proper antecedent basis, and reconsideration of claims 2-5 is respectfully requested.

15

3. Rejection of claims 1, 3, 4, 5, 7-9, 11, 12, and 14 under 35 U.S.C. 102(b):

Claims 1, 3, 4, 5, 7-9, 11, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuoka et al (US 6,008,773).

Response:

The applicant would like to point out how independent claims 1 and 8 are patentably distinguished from the Matsuoka patent.

20

In the current office action, the Examiner states that Matsuoka teaches "a feed-line 5 of electrically conductive material disposed on the second surface of the dielectric layer, a first radiating element 3 of electrically conductive material disposed on the dielectric layer and electrically connected to the feed-line" (emphasis added). The Examiner

BEST AVAILABLE COPY

compares the feed-line in the claims to the folded conductor 5 in Matsuoka (see Fig.1,) and compares the first radiating element in the claims to the conductor 3 in Matsuoka (see Fig.1.) However, upon examining the contents of Matsuoka, the applicant notes that Matsuoka fails to teach that the conductor 3 is electrically connected to the folded conductor 5. As can be seen in Matsuoka in Fig.1, the conductor 3 and the folded conductor 5 are disposed on opposite sides of the dielectric substrate 2, and Matsuoka does not teach or suggest an electrical connection between the conductor 3 and the folded conductor 5. Instead, the conductor 3 and the folded conductor 5 are separated by a substrate. For this reason, independent claims 1 and 8 are patentable over the Matsuoka patent and should be allowed. Since claims 3, 4, 5, 7, 9, 11, 12, and 14 are dependent on claims 1 and 8, claims 3, 4, 5, 7-9, 11, 12, and 14 should be allowed if claims 1 and 8 are allowed. Reconsideration of claims 1, 3, 4, 5, 7-9, 11, 12, and 14 is respectfully requested.

4. Rejection of claims 1, 2, 6, 8, 9, 10, and 13 under 35 U.S.C. 102(b):

Claims 1, 2, 6, 8, 9, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Richard et al (US 6,002,369).

Response:

The applicant would like to point out how claim 1 is patentably distinguished from the Richard patent. In addition, the applicant has amended independent claim 8 to make claim 8 patentable over the Richard patent. Claim 8 now contains limitations found in the original claims 1 and 9. No new matter has been added as a result of this amendment.

Claim 1 and the amended claim 8 each contain the limitations of a ground layer covering a portion of the first surface of the dielectric layer and a feed-line disposed on the second surface of the dielectric layer.

On the other hand, Richard fails to teach that the ground layer covers a first surface of the dielectric layer and that the feed line is disposed on the second surface. The Examiner states on page 4 of the current office action that Richard's Fig.2 teaches a

BEST AVAILABLE COPY

ground layer covering a first surface of the dielectric layer and a feed line connected to the second surface of the dielectric layer. However, the applicant respectfully disagrees. Richard does not clearly teach that the feed line is disposed on the second surface of the dielectric layer. Fig.2 does not provide enough detail to ascertain this, and moreover,

5 Richard's specification also does not teach or suggest this.

For this reason, independent claims 1 and 8 are patentable over the Richard patent. Claims 2, 6, 9, 10, and 13 are dependent on claims 1 and 8 and should be allowed if claims 1 and 8 are allowed. Reconsideration of claims 1, 2, 6, 8, 9, 10, and 13 is respectfully requested.

10 5. Introduction to new claims 15-23:

Newly added independent claim 15 recites a first radiating element generating a first radio signal at a frequency of about 5.5GHz, a second radiating element generating a first radio signal at a frequency of about 2.45GHz, and that electromagnetic energy is coupled from the first radiating element to the second radiating element. Support for these
15 limitations comes from paragraph 0023 of the original specification.

Neither Matsuoka nor Richard teaches an antenna capable of operating at both the 5.5GHz frequency band and the 2.45GHz frequency band, and therefore the newly added independent claim 15 should be placed in condition of allowance.

New claim 16 specifies that the present invention is directed to a wireless LAN
20 application. Support is given in paragraph 0005, which states that the antennas discussed in the instant applicant can be included in wireless network cards. New claims 17-23 are each also fully supported in the original disclosure as filed. Since the newly added claims 16-23 are dependent claims of the independent claim 15, they should also be considered allowable if claim 15 is allowed. Acceptance of new claims 15-23 is requested.

25

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

BEST AVAILABLE COPY

Sincerely yours,



Date: March 03, 2005

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).